

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of the claims in the application:

**Listing of Claims:**

Claim 1 (previously presented): An immunogenic conjugate comprising a synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide covalently linked to a carrier, wherein the conjugate elicits an immune response against poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide in a subject.

Claim 2 (currently amended): The conjugate of claim 1, wherein the ~~conjugate comprises~~ a synthetic homopolymer of  $\gamma$ PGA polypeptide comprising comprises 5-20 glutamic acid residues.

Claim 3 (currently amended): The conjugate of claim 1, wherein the ~~conjugate comprises~~ a synthetic homopolymer of  $\gamma$ PGA polypeptide comprising comprises 10-15 glutamic acid residues.

Claim 4 (currently amended): The conjugate of claim 1, wherein the ~~conjugate comprises~~ the synthetic homopolymer of  $\gamma$ PGA polypeptide is a decameric  $\gamma$ PGA polypeptide.

Claim 5 (previously presented): The conjugate of claim 1, wherein the carrier is selected from the group consisting of: (a) recombinant *B. anthracis* protective antigen, (b) recombinant *P. aeruginosa* exotoxin A, (c) tetanus toxoid, (d) diphtheria toxoid, (e) pertussis toxoid, (f) *C. perfringens* toxoid, (g) hepatitis B surface antigen, (h) hepatitis B core antigen, (i) keyhole limpet hemocyanin, (j) horseshoe crab hemocyanin, (k) edestin, (l) mammalian serum albumins, (m) mammalian immunoglobulins, and (n) combinations of two or more thereof.

Claim 6 (original): The conjugate of claim 1, wherein the carrier comprises recombinant *B. anthracis* protective antigen.

Claim 7 (canceled).

Claim 8 (currently amended): The conjugate of claim 1, wherein the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide is the D-conformation, the L-conformation, or a mixture of the D-conformation and the L-conformation.

Claim 9 (currently amended): The conjugate of claim 1, wherein the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide is a  $\gamma$ DPGA polypeptide.

Claim 10 (currently amended): The conjugate of claim 1, wherein the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide is a decameric  $\gamma$ DPGA polypeptide and the carrier comprises recombinant *B. anthracis* protective antigen.

Claim 12 (currently amended): The conjugate of claim 1, wherein the carrier is covalently linked to either the amino or carboxyl terminus of the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide.

Claim 12 (currently amended): The conjugate of claim 1, wherein the carrier is covalently linked to the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide via a thioether, disulfide, or amide bond.

Claim 13 (currently amended): The conjugate of claim 1, wherein the density of the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide to carrier is between about 5:1 and about 32:1.

Claim 14 (currently amended): The conjugate of claim 1, wherein the density of the synthetic homopolymer of poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide to carrier is between about 10:1 and about 15:1.

Claim 15 (currently amended): The conjugate of claim 1, wherein the synthetic homopolymer of  $\gamma$ PGA polypeptide is covalently linked to the carrier via an aldehyde (CHO)/adipic acid hydrazide (AH) linkage.

Claim 16 (previously presented): A composition comprising the conjugate of claim 1 and a pharmaceutically acceptable vehicle.

Claim 17 (original): The composition of claim 16, further comprising an adjuvant.

Claim 18 (previously presented): A composition comprising the conjugate of claim 9 and a pharmaceutically acceptable vehicle.

Claim 19 (original): The composition of claim 18, further comprising an adjuvant.

Claim 20 (previously presented): A method of eliciting an immune response against a *Bacillus* antigenic epitope in a subject, comprising introducing into the subject the composition of claim 16, thereby eliciting an immune response in the subject.

Claim 21 (previously presented): The method of claim 20, wherein the immune response is elicited against the poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide.

Claim 22 (previously presented): The method of claim 20, wherein the immune response is elicited against the poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide and the carrier.

Claims 23-33 (canceled).

Claim 34 (previously presented): An immunogenic conjugate comprising a *Bacillus* poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide covalently linked to a carrier, wherein the carrier is selected from the group consisting of: (a) recombinant *B. anthracis* protective antigen, (b) recombinant *P. aeruginosa* exotoxin A, (c) tetanus toxoid, (d) diphtheria toxoid, (e) pertussis toxoid, (f) *C. perfringens* toxoid, (g) hepatitis B surface antigen, (h) hepatitis B core antigen, (i)

keyhole limpet hemocyanin, (j) horseshoe crab hemocyanin, (k) edestin, (l) mammalian serum albumins, and (m) combinations thereof, and wherein the conjugate elicits an immune response against *Bacillus* poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide in a subject.

Claim 35 (previously presented): The conjugate of claim 34, wherein the carrier comprises recombinant *B. anthracis* protective antigen.

Claim 36 (previously presented): The conjugate of claim 34, wherein the *Bacillus*  $\gamma$ PGA polypeptide comprises a *B. anthracis*, *B. licheniformis*, *B. pumilus*, or *B. subtilis*  $\gamma$ PGA polypeptide.

Claim 37 (previously presented): The conjugate of claim 34, wherein the *Bacillus*  $\gamma$ PGA polypeptide is the D-conformation, the L-conformation, or a mixture of the D-conformation and the L-conformation.

Claim 38 (previously presented): The conjugate of claim 34, wherein the *Bacillus*  $\gamma$ PGA polypeptide is a *B. anthracis* capsular  $\gamma$ DPGA polypeptide.

Claim 39 (previously presented): The conjugate of claim 34, wherein the carrier is covalently linked to either the amino or carboxyl terminus of the *Bacillus*  $\gamma$ PGA polypeptide.

Claim 40 (previously presented): The conjugate of claim 34, wherein the carrier is covalently linked to the *Bacillus*  $\gamma$ PGA polypeptide via a thioether, disulfide, or amide bond.

Claim 41 (previously presented): The conjugate of claim 34, wherein the *Bacillus*  $\gamma$ PGA polypeptide is covalently linked to the carrier via an aldehyde (CHO)/adipic acid hydrazide (AH) linkage.

Claim 42 (previously presented): A composition comprising the conjugate of claim 34 and a pharmaceutically acceptable vehicle.

Claim 43 (previously presented): The composition of claim 42, further comprising an adjuvant.

Claim 44 (previously presented): A method of eliciting an immune response against a *Bacillus* antigenic epitope in a subject, comprising introducing into the subject the composition of claim 42, thereby eliciting an immune response in the subject.

Claim 45 (previously presented): The method of claim 44, wherein the immune response is elicited against the *Bacillus* capsular poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide.

Claim 46 (previously presented): The method of claim 44, wherein the immune response is elicited against the *Bacillus* capsular poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) polypeptide and the carrier.

Claim 47 (previously presented): The conjugate of claim 1, wherein the carrier is a polysaccharide or a polypeptide.

Claim 48 (previously presented): The conjugate of claim 1, wherein the carrier is a bacterial toxin or a viral protein.

Claim 49 (previously presented): The conjugate of claim 5, wherein the carrier is selected from the group consisting of (a) recombinant *B. anthracis* protective antigen, (b) recombinant *P. aeruginosa* exotoxin A, (c) tetanus toxoid, (d) diphtheria toxoid, (e) pertussis toxoid, (f) *C. perfringens* toxoid, (g) hepatitis B surface antigen, and (h) hepatitis B core antigen.

Claim 50 (previously presented): The conjugate of claim 9, wherein the carrier is *B. anthracis* protective antigen, and the conjugate elicits an immune response against  $\gamma$ DPGA and against *B. anthracis* protective antigen.

Claim 51 (previously presented): The conjugate of claim 9, wherein the conjugate elicits IgG anti- $\gamma$ DPGA antibodies in the subject.

Claim 52 (previously presented): The conjugate of claim 51, wherein the conjugate also elicits IgG anti-carrier antibodies.

Claim 53 (previously presented): The method of claim 20, wherein the immune response elicits IgG anti- *B. anthracis*  $\gamma$ PGA antibodies and IgG anti-carrier antibodies in the subject.

Claim 54 (previously presented): The conjugate of claim 34, wherein the carrier is selected from the group consisting of (a) recombinant *B. anthracis* protective antigen, (b) recombinant *P. aeruginosa* exotoxin A, (c) tetanus toxoid, (d) diphtheria toxoid, (e) pertussis toxoid, (f) *C. perfringens* toxoid, (g) hepatitis B surface antigen, and (h) hepatitis B core antigen.

Claim 55 (previously presented): The conjugate of claim 38, wherein the conjugate elicits IgG anti- $\gamma$ DPGA antibodies and IgG anti-carrier antibodies in the subject.

Claim 56 (previously presented): The method of claim 44, wherein the immune response elicits IgG anti- *B. anthracis*  $\gamma$ PGA antibodies and IgG anti-carrier antibodies in the subject.

Claim 57 (currently amended): The conjugate of claim 1, wherein the conjugate includes a plurality of synthetic homopolymer of  $\gamma$ PGA polypeptide chains per carrier molecule.

Claim 58 (currently amended): The conjugate of claim 1, wherein the conjugate has a density of synthetic homopolymer of  $\gamma$ PGA chains to carrier molecule of at least about 5:1.

Claim 59 (currently amended): The conjugate of claim 34, wherein the conjugate includes a plurality of *Bacillus*  $\gamma$ PGA polypeptide chains per carrier molecule.

Claim 60 (currently amended): The conjugate of claim 34, wherein the conjugate has a density of *Bacillus*  $\gamma$ PGA chains to carrier molecule of at least about 5:1.

Claim 61 (previously presented): An immunogenic conjugate comprising poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) covalently linked to a carrier, wherein the conjugate elicits an immune

response against poly- $\gamma$ -glutamic acid ( $\gamma$ PGA) in a subject, and the conjugate has a density of  $\gamma$ PGA chains to carrier molecule of at least about 5:1.

Claim 62 (previously presented): The conjugate of claim 57, wherein the carrier is a polymeric carrier.

Claim 63 (previously presented): The conjugate of claim 58, wherein the carrier is a polymeric carrier.